

Tuesday, February 21, 2017 7:48:36 AM

157208

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 3/4/2017 **Req'd Qty:** 1.00 ***1***

Customer:

Reference: 17-3-2017
31-3-2017

Approvals: _____ **Process Plan:** _____

Date: _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: 9-89

Date: FEB 21 2017 SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI9559	A
IIN-D412-702-1	A

DAS 6 MAR 22 2017

100	Document Control	0.00
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100

DOCUMENT CONTROL

DC	Memo	0.00
----	------	------

Doc.Control -USB or Paperwork Photocopy bluefile and create labels per PPP D412-702-021 CHG003

DA
21
9-96

DAS
28
9-80

MAR 31 2017

110	Pick Kit	0.00
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110

Pick Kit

Packaging

Packaging

DA
6
9-80

MAR 27 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :					

Work Order ID 157208

Tuesday, February 21, 2017 7:48:36 AM

157208

Page 2

Item ID: D412-702-021

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 3/4/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									
130		0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-702-021								
	Location: <u>F9029</u> <u>sold</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

DAS
28
9-89

MAR 3 0 2017

DAS
28
9-89

MAR 3 1 2017

DAS
21
9-89

MAR 3 1 2017

ME
17-3-37

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Tuesday, February 21, 2017 7:48:40 AM

Page 1

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B Removed Manufacturing 05-11-08 JLM
IPP Rev:C06.04.03As per DSI9324 JLM
IPP rev D 06.12.14 per ecn 871 EC
IPP Rev:E 07-03-14 As per DSI 9351 JLM
IPP Rev:F 07-07-28 As per Rev E JLM Verified By:ec IPP Rev.G
11.05.31 DSI 9559 EC verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-13A		Purchased	No			120	Each	551.0000	4	4			

AN4-13A

Bolt

Location	Loc Qty	Loc Code
FG	20	
122808	20	
GA	76	
m134634	19	
m135470	57	
over003	300	
m136787	300	
ST344	155	
m136665	155	

DAS
28
9-89

DAS
6
9-89

MAR 27 2017
DAS
27
9-89

AN4-20A

AN4-20A

Bolt

Purchased No

120 Each

226.0000

8 8

Location	Loc Qty	Loc Code
GA	6	
m116419	6	
over003	160	
m136586	100	
m136665	60	
ST343	60	
m135966	36	
m136148	24	

DAS
28
9-89

DAS
6
9-89

MAR 27 2017
DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause			FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐						

Picklist Print

Tuesday, February 21, 2017 7:48:40 AM

Page 2

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

AN4-5A Purchased No 120 Each 105.0000 4 4

AN4-5A

BOLT

DAS
28
9-89

Location

Loc Qty

Loc Code

over003 100
m136787 100
ST345 5
m134039 5

**

DAS
6
9-89

DAS
27
9-89
MAR 27 2017

D3195-041 Manufactured No 120 Each 5.0000 2 2

D3195-041

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

ST021 5
152845 5

**

1572557

DAS
6
9-89

DAS
27
9-89

D3195-043 Manufactured No 120 Each 6.0000 2 2

D3195-043

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

ST021 6
152844 6

**

152844

DAS
6
9-89

DAS
27
9-89

D3196-1 Manufactured No 120 Each 4.0000 1 1

D3196-1

Bar

DAS
28
9-89

Location

Loc Qty

Loc Code

ST256 4
148466 4

**

1

DAS
6
9-89

MAR 27 2017

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
2AC 3 PR-C			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Tuesday, February 21, 2017 7:48:40 AM

Page 3

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

D3196-3

Manufactured No

120 Each

2.0000

1 1

D3196-3

Bar

Location

Loc Qty

Loc Code

ST256

2

150581

2

D3196-4

Manufactured No

120 Each

6.0000

1 1

D3196-4

Bar

Location

Loc Qty

Loc Code

ST256

6

155354

6

D3197-041

Manufactured No

120 Each

1.0000

2 2

D3197-041

Bar

Location

Loc Qty

Loc Code

ST256

1

152733

1

D3198-1

Manufactured No

120 Each

13.0000

4 4

D3198-1

Fitting

Location

Loc Qty

Loc Code

ST021

13

142843

1

150644

4

155539

8

Tuesday, February 21, 2017 7:48:40 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, February 21, 2017 7:48:40 AM

Page 4

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

D3268-1

Manufactured No

120 Each

5.0000

2 2

D3268-1

Placard

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST028

5

154442

5

12/23/2017

2 2

D3546-1

Manufactured No

120 Each

6.0000

2 2

D3546-1

Clip

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST042

6

153028

6

2

D3551-11

Manufactured No

120 Each

4.0000

13 13

D3551-11

Hook And Loop Tie

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST416

4

154866

4

157199x7
157164x6

D412-702-069

Manufactured No

120 Each

4.0000

1 1

D412-702-069

Grommet

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST370a

4

155649

4

1

D4387-041

Manufactured No

120 Each

6.0000

9 9

D4387-041

Harness Assembly

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST467

6

154864

6

156093x8
157163x8

Tuesday, February 21, 2017 7:48:41 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, February 21, 2017 7:48:41 AM

Page 5

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

D4387-043

Manufactured No

120 Each

8.0000

4 4

D4387-043

Harness Assembly

**

DAS 6 9-89

MAR 27 2017

DAS 27 9-89

Location

Loc Qty

Loc Code

ST467

8

154429

4

154863

4

MS21042L4

Purchased No

120 Each

2,419.000

12 12

MS21042L4

Nut

**

DAS 6 9-89

MAR 27 2017

DAS 27 9-89

Location

Loc Qty

Loc Code

FP001

18

m133363

18

GA

187

m135058

187

OVER007

1500

m136450

500

m136838

1000

ST303

714

m136648

714

MS24694-S152

Purchased No

120 Each

16.0000

8 8

MS24694-S152

Screw

**

DAS 6 9-89

MAR 27 2017

DAS 27 9-89

Location

Loc Qty

Loc Code

ST282

16

m136182

16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, February 21, 2017 7:48:41 AM

Page 6

Work Order ID: 157208

157208

Parent Item: D412-702-021

D412-702-021

Parent Item Name: Shoulder Harness,4 Point Attachment,13 Man Configuration

Start Date: 2/17/2017

Required Date: 3/4/2017

Start Qty: 1.00

Required Qty: 1.00

MS24694-S154

Purchased

No

120

Each

14.0000

8

8

MS24694-S154

Screw

**

M1369862

DAS

DAS

MAR 27 2017

6

27

9-89

Location

Loc Qty

Loc Code

ST282

14

m135058

14

NAS1149D0463J

Purchased

No

120

Each

2,964.000

20

20

NAS1149D0463.J

Washer

**

MAR 27 2017

DAS
6
27
9-89

Location

Loc Qty

Loc Code

GA

80

M134508

13

M135056

67

ST260a

1000

M136838

1000

ST263

1884

M136665

1884

20

Tuesday, February 21, 2017 7:48:41 AM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																													
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																																											
Description Work Order Deviation			Disposition																																																																												
			Completed By																																																																												
			Lead hand / Supervisor Approval Verification																																																																												
			QC / QA Coordinator Approval																																																																												
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DART SERVICE INSTRUCTION

TO AMEND IIN-D412-702-1 REV. A,
AND ICA-D412-702 REV. 4 OR EARLIER APPROVED REVISIONS
REF. TCCA STC: SH04-7
REF. FAA STC: SR01997NY
REF. EASA STC: EASA.IM.R.S.00710

PURPOSE

The purpose of this DSI is to outline the replacement of existing D3446-041/-043 Shoulder Harnesses with the new and improved D4387-041/-043 Shoulder Harnesses.

CHANGE

For the following Kits, the D4387-041 and D4387-043 Shoulder Harnesses respectively replace the D3446-041 and D3446-043 Shoulder Harnesses as follows:

Old Harness P/N	Used On	New Harness P/N	Effectivity
D3446-041	D412-702-021	D4387-041	CHG 003 and subsequent
	D412-702-023		CHG 002 and subsequent
	D412-702-027		
	D412-702-029		
D3446-043	D412-702-021	D4387-043	CHG 003 and subsequent
	D412-702-025		CHG 002 and subsequent

Customers who want to upgrade their shoulder harnesses may replace their existing D3446-041/-043 with D4387-041/-043 per this service instruction.

SHOP COPY
RETURN TO
ENGINEERING
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 157208 M.C.S
17-02-21

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.05.09
CERT. NO.: SH04-7
ISSUE NO.: 3

A	NEW ISSUE	MB	11.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.	N/A		
APPROVED			
DE APPR.			
DATE	11.05.09		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A SHEET 1 OF 1	
DRAWING NO. DSI 9559		SCALE NTS	
TITLE HARNESS CHANGE			
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QTY -021	QTY -023	QTY -025	QTY -027	QTY -029	QTY -035	Part Number	Description
X						D412-702-021	Dart 13-Man Shoulder Harness Kit, 4-point
	X					D412-702-023	Dart 5-Man Forward Facing Shoulder Harness Kit, 4-point
		X				D412-702-025	Dart 4-Man Aft Facing Shoulder Harness Kit, 4-point
			X			D412-702-027	Dart 4-Man Side Facing Shoulder Harness Kit, 4-point
				X		D412-702-029	Dart 1-Man Forward Facing Shoulder Harness Kit, 4-point
					X	D214-702-035	Dart 5-Man Aft Facing Shoulder Harness Kit, 4-point, for Bell 214B/B-1
1	1		1	1		D412-702-069	GROMMET KIT
2	2					D3195-041	BRACKET
2	2					D3195-043	BRACKET
1	1			1		D3196-1	BAR
1			1			D3196-3	BAR
1			1			D3196-4	BAR
2	2					D3197-041	BAR
4		4				D3198-1	FITTING
2	2					D3268-1	PLACARD
9	5		4	1		D3446-041	HARNESS ASSEMBLY, 4 POINT
4		4				D3446-043	HARNESS ASSEMBLY, 4 POINT
					5	D3446-045	HARNESS ASSEMBLY, 4 POINT
13	5	4	4	1	5	D3551-11	HOOK AND LOOP TIE
2	2					D3546-1	CLIP
4		4				AN4-5A	BOLT
4	4					AN4-13A	BOLT
8		8				AN4-20A	BOLT
20		20				AN960JD416	WASHER (OR NAS1149D0463J)
12		12				MS21042L4	NUT (OR MS21042-4)
8	2		6	2		MS24694-S152	SCREW
8	2		6	2		MS24694-S154	SCREW

QTY -069	Part Number	Description
X	D412-702-069	GROMMET KIT
24	D3619-2	GROMMET
1	D3619-2T1	HOLE PUNCH
1	D3619-2T2	STRIKER BLOCK
1	D3619-2T3	PUNCH
1	D3619-2T4	DIE

DART SERVICE INSTRUCTION

TO AMEND IIN-D412-702-1 REV. A,
AND ICA-D412-702 REV. 4 OR EARLIER APPROVED REVISIONS
REF. TCCA STC: SH04-7
REF. FAA STC: SR01997NY
REF. EASA STC: EASA.IM.R.S.00710

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	D412-702-025		CHG 002 and subsequent

Customers who want to upgrade their shoulder harnesses may replace their existing D3446-041/-043 with D4387-041/-043 per this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.05.09
CERT. NO.: SH04-7
ISSUE NO.: 3

A	NEW ISSUE	MB	11.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9559	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		HARNESS CHANGE	NTS
DATE	11.05.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Change Record

PAGE 1 OF 1

Part Number: D412-702-021

Description: 13-MAN SHOULDER HARNESS

[illegible]